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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/532,628	11/21/2005	Volkmar Schulze	4836-016/NP	6810

27572 7590 05/12/2008
HARNESS, DICKEY & PIERCE, P.L.C.
P.O. BOX 828
BLOOMFIELD HILLS, MI 48303

EXAMINER	
NICHOLS, CHRISTOPHER S	
ART UNIT	PAPER NUMBER
4191	
MAIL DATE	DELIVERY MODE
05/12/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/532,628	SCHULZE ET AL.	
	Examiner	Art Unit	
	CHRISTOPHER S. NICHOLS	4191	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 April 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-12* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-12* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *25 April 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *4/25/2005*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

METHOD FOR THE DIRECT BACKFOAMING OF ABSORBER SYSTEMS

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-12 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- Claim 1 recites the limitation "very low density" in line 3 of Claim 1. The scope of "very low density" is unclear and vague.
- Claim 1 recites the limitation "the mass side" in line 4 of Claim 1. There is insufficient antecedent basis for this limitation in the claim. The limitation "the mass side" appears throughout several other claims (e.g. claim 4, 8, etc.). For purposes of compact prosecution, "the mass side" is interpreted as "the foam impermeable non-woven layer of the absorber."
- Claim 1 recites the limitation "the side facing away from the mass" in line 4 of Claim 1. There is insufficient antecedent basis for this limitation in the claim. For purposes of compact prosecution, "the side facing away from the mass" is interpreted as "the air permeable non-woven layer of the absorber."
- Claim 6 recites the limitation " heavy layer side" in line 3 of Claim 6. There is insufficient antecedent basis for this limitation in the claim.
- Claim 11 recites the limitation "a segment construction" in line 5 of Claim 11. The scope of "segment construction" is unclear and vague.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claim 12 is rejected under 35 U.S.C. 102(b) as being anticipated by Kraus (DE 19909046 A1). A machine translation of DE 19909046 A1 is provided. All page and paragraph references refer to the machine translation.

Regarding **Claim 12**, Kraus teaches an absorber system (see Fig. 1 at 1). The absorber system consists of a foam layer (see Fig. 1 at 2; see also page 2 Paragraph 7) or non-woven layer (see Claim 6). The foam layer has a low density (see claim 7). The foam layer or non-woven layer is covered with a cover layer (see Fig. 1 at 4) that is foam-impermeable (see page 2 Paragraph 7; see also page 3 Paragraph 1). The cover layer is covered with a foam layer in a foaming process (see Fig. 4 at 3). The product produced by the method of Kraus is substantially similar to the product claimed. "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kraus (DE 19909046 A1) in view of Koeck (DE 19734913 A1). Machine translations of DE 19909046 A1 and DE 19734913 A1 are provided. All page and paragraph references refer to the machine translations.

Regarding **Claim 1**, Kraus teaches an absorber system (see Fig. 1 at 1). The absorber system consists of a foam layer (see Fig. 1 at 2; see also page 2 Paragraph 7) or non-woven layer (see Claim 6). The foam layer has a low density (see claim 7). The foam layer or non-woven layer is covered with a cover layer (see Fig. 1 at 4) that is foam-impermeable (see page 2 Paragraph 7; see also page 3 Paragraph 1) on the mass side (see Fig. 1 at 3). The absorber is positioned in a mold (see Fig. 3 at 8) before the foaming process (see Fig. 4). Kraus is silent regarding the absorber system with a cover layer on both side and building a pressure within the absorber in the closed mold.

Koeck teaches a method of manufacturing sound absorbing material. The absorber system (see Fig. 1) is manufactured by placing a foam or non-woven layer (see Fig. 1 at 3; see also page 4 Paragraph 5) with a cover layer (see Fig. 1 at 2a, 2b) on both sides of the non-woven layer. In addition, Koeck teaches building a pressure within the absorber in a closed mold by injecting compressed air (see page 3 Paragraph 4-6; see also Fig. 1). Injecting compressed air

into a closed mold increases the pressure within the entire absorber, i.e. all sides of the absorber experience an increase in pressure from injecting compressed air. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use a closed mold to build pressure within an absorber system to produce an absorber to use in the method by Kraus because Koeck teaches that building a pressure within the absorber in the closed mold reduces production time (see page 3 Paragraph 5).

Regarding **Claim 2**, Koeck teaches injecting compressed air to the mold (see page 3 Paragraph 4-6; see also Fig. 1).

Regarding **Claim 3**, Koeck teaches injecting compressed air with a pressure from 1-20 bar (see page 4 Paragraph 5).

Regarding **Claim 4**, Kraus teaches the cover layer (see Fig. 1 at 4) is made of the same material (see page 2 Paragraph 7) as the foam layer (see Fig. 1 at 2). The foam layer may be made of plastic (see Claim 5).

Regarding **Claim 5**, Kraus teaches the foam has a low density (see claim 7) between 5 and 200 kg/m^3 (see Claim 7).

Regarding **Claims 6-8**, Kraus teaches an absorber system consisting of a foam layer (see Fig. 1 at 2; see also page 2 Paragraph 7) or non-woven layer (see Claim 6), i.e. foam-molded cold foam. The foam layer or non-woven layer is covered with a cover layer (see Fig. 1 at 4) that is foam-impermeable (see page 2 Paragraph 7; see also page 3 Paragraph 1) on the mass side (see Fig. 1 at 3). The foam has a low density (see claim 7) between 5 and 200 kg/m^3 (see Claim 7).

Regarding **Claims 9-11**, Koeck teaches injecting compressed air to the mold (see page 3 Paragraph 4-6; see also Fig. 1). The pressure of the compressed air is regulated by valves (see

page 6 Paragraph 1). Koeck teaches injecting compressed air with a pressure from 1-20 bar (see page 4 Paragraph 5), i.e. defined pressure.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher S. Nichols whose telephone number is (571) 270-3969. The examiner can normally be reached on Monday thru Thursday 7:30 AM to 5:00 PM EST. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dah-Wei Yuan can be reached on (571) 272-1295. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Christopher S. Nichols/
Examiner, Art Unit 4191

/Dah-Wei D. Yuan/
Supervisory Patent Examiner, Art Unit 4191